DOCUMENT RESUME

ED 142 984 CS 003 628

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TITLE CATS--Content Area Teaching Strategies.
PUB DATE May 77
NOTE 11p.; Paper presented at the Annual Meeting of the International Reading Association (22nd, Miami Beach, Florida, May 2-6, 1977)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Cloze Procedure; *Content Reading; Informal Reading Inventory; *Instructional Materials; Middle Schools; *Readability; Readability Formulas; *Reading Instruction; Secondary Education; Study Skills; *Teaching Techniques; Textbook Selection

ABSTRACT

This paper discusses methods of teaching reading in the content areas at the middle school, junior high school, and secondary school levels. If a textbook is to be used, teachers should examine it by administering a readability formula and by checking the book's vocabulary, sentence patterns, and introduction of abstract concepts. To find how well students can use the book, teachers could administer reading inventories or use cloze procedures, or they could present class exercises in the use of the table of contents, index, glossary, and other parts of the book. The paper reviews Anthony V. Manzo's Guided Reading Procedure, some questioning techniques, and Robert Karlin's process guides, as methods of preparing students to read in the content areas. In cases where having only a textbook is not desirable or practical, teachers are advised to develop content reading through tape-recorded and audiovisual materials or combinations of books with varying reading levels. The paper also suggests a language experience approach and individualized reading activities that can be used by teachers who do not wish to use textbooks for instruction in the content areas. (RL)

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CATS - Content Area Teaching Strategies

Teaching school is a difficult job! As classroom teachers, we are convinced of that fact. Those of us who teach in middle, junior high and secondary schools know that the problem of reading in the content areas compounds our troubles. Many of our students cannot read their content area books, and that situation is frustrating for the students and for us. This problem can be traced to many complex and interwoven sources--not just that lousy teacher who taught our students last year! Perhaps the key problem is that much of our content area instruction involves reading a textbook that is often beyond the reading abilities of many of our students. Often the readability levels of the textbooks that we use run one to two levels or more above the grade level in which they are used. In the past year, this writer had occasion to check the readability level of some language arts workbooks that the publisher had quoted as being on second grade level. On several passages, the lowest level turned out to be sixth grade level! Even though the readability formulae are not always accurate and do not measure all factors, this situation certainly influences our difficulties in how we teach reading in the content areas.

The purpose of this article is to discuss some methods of teaching reading in the content areas. What are some tried and proven strategies that will work? Perhaps, instruction can be improved if we work on five major strategies. These include

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the following: 1) Knowing our textbooks; 2) Knowing how well our students can use their texts; 3) Preparing our students before they read; 4) Using alternatives to the text; 5) Eliminating the use of the text.

First, if a textbook is the major vehicle of instruction, a careful perusal of the text is an absolute necessity. Since many content area teachers have as their main concern the discipline that they teach (a legitimate feeling after their years of study in their respective fields), the book is often the key to the course of study. Therefore, it is important to know about the book. Running one of the simpler readability formulae is one means of getting to know a book. These data often indicate that the book is written at much too difficult a level for the students who use it or that parts of the book vary in reading levels. Having some idea of its readability level may give us some valuable insight as we teach. Some of these computations can become very intricate, but the Flesch (1948) formula and the Fry (1968) readability graph are fairly simple and accurate to use.

In addition to this statistic, however, it is important to pay attention to the vocabulary in the books that we use. Gail West (1974) divides vocabulary into the three categories of technical, special and general. In working with our texts, we need to determine how much of the vocabulary is technical? Special? General, but hard? After our survey, we must devise ways to teach these words; this task may include anything from

creative dramatics to a concentration game. Also, we need to look at the number of difficult words introduced and/or used per page or chapter. Even for competent readers, too many difficult words per page or selection may prove frustrating.

We need, finally, to consider two other variables in our textbooks. These factors are sentence patterns and concept load. Neither are measured by readability formulae, but very complicated sentence patterns and the quick introduction of numerous abstract concepts can make reading passages difficult even when the vocabulary is simple. These two areas are important when we want to have a thorough knowledge of the books that we ask our students to use.

We need also to assume the role of our students and try to share their perceptions of their books. If there is little white space, double columns, small print, few pictures and/or many tables and graphs, the book may simply look hard. These "looks" then require the teacher to devote some time to helping students realize that the text is not as foreboding as it may appear.

Once we know about the books, the next idea to explore is how well our students can use the books. We may need to give a group or individual reading inventory or cloze to have some idea of whether the book is on our students' instructional level. The cloze, of course, is the simplest to construct, administer and score, but the informal inventories can provide more diagnostic

information. There are several ways of constructing these instruments, and, since they are informal, there are not absolute rules. It is beyond the scope of this paper to discuss how to construct these tests, but West (1974), Miller (1974), Rakes (1975) and Clary (1976) all offer helpful ideas. (See the bibliography at the end of this article.)

As a part of the group informal or as a separate exercise, it is often advantageous, even for good readers, to do some book part exercises as they begin a new book. Asking such questions as "What chapter begins on page 59?" or "What page in the index lists Peruvian farming methods?" forces our students to use the table of contents, index, preface, lists of tables and graphs, glossary and other parts of the book. They may find out about book parts that they would never have discovered otherwise, and we get a "feel" for how well they can use their text and its component parts.

Probably the most important topic of this discussion is the next--preparing our students to read. Many teachers already use the directed reading activity or the directed reading thinking lesson or SQ3R. Therefore, Manzo's (1975) Guided Reading Procedure, some questioning techniques and Karlin's (1975) process guides are some alternatives for preparing students to read that will be reviewed here.

The Guided Reading Procedure is aimed at bettering students' comprehension abilities. This procedure can be done

with almost any level students in group situations, but Manzo suggests that it be employed only about once a week. To use this procedure, the teacher selects a passage that is the average length assignment for the group. Then, after establishing appropriate readiness for the particular passage and setting a purpose for reading the material, the students are told to read and remember all that they can about the selection. This is the first actual step of the procedure. After reading, the class tells as much as they can remember about the passage, and the teacher writes what they say on the board. Any time a conflict develops in the students' recall, they are asked to review the reading to determine the correct information. These are steps two and three, respectively. The group tries, as a fourth step, to organize their ideas into a sequence of events or skeletal outline. As questions arise that are needed for the students to totally comprehend their reading, the teacher should be sure that they are asked and answered. This step is number five and aids in transfer of learning. The sixth step is a short-term memory evaluation, usually a multiple choice, recall, matching or essay test. Finally, step seven is optional. If used, it is essentially the same as step six, except that more study is involved and the test evaluates more long-term memory.

Questioning techniques are another key to preparing students to read. As teachers, we should always know what we want students to retain from their reading assignments before they read.

We should also do at least a mental task analysis to determine the types of comprehension abilities that we are asking them to use. Questioning techniques--that is, the way that we ask or write questions--then should follow the following two guidelines. First, we should provide students with some questions before they read that cover the major purposes of the assignment. These will encompass the most important ideas, of course, but we might want to try to make the purposes broad and challenging, interesting and relevant to the lives of the students. They should include generalizations as well as facts. After some training in reading for the purposes that we deem important, we must help students learn to preview material and then formulate their own purposes for reading. Secondly, we must help students learn to use a variety of comprehension skills in their reading--remembering facts, inferring, anticipating, evaluating, drawing conclusions. This development generally takes place by our asking various types of comprehension questions. It is all too easy to ask mostly facts, but that is not how we help students read most proficiently.

Finally, a third technique for preparing the student to read is the process guide. This device, originated by Robert Karlin (1975), is used most often in conjunction with directed reading lessons. Students use the process guide after they have been introduced to the material and understand their purposes for reading. Usually, the guides are duplicated on strips of

paper that line up with the text; they serve as a sort of "paper teacher" while the students read independently. Look at the example below from an eighth grade reader.[1]

For thousands of years the Chinese have practiced a method of medical treatment called acupuncture. While the exact origins of this practice are unkown, legend has it that a Chinese emperor long ago discovered that soldiers wounded by arrows recovered from illnesses in other parts of their bodies. About 2500 B. C. the first text on acupuncture described the two forces of energy within the body--yin (a negative force) and yang (a positive force). Internal illnesses were thought to result from an imbalance between the negative and positive forces in the body. Over the years acupuncture has been used to treat bodily malfunctions, such as asthma, headaches, and insomnia, but it is now most widely used as an anesthesia.	ak yū pəŋ(k) chər An important fact Where was acupuncture first used? Internal is the opposite of external. The prefix im means not Mal means bad. What is the base word in malfunctions? What's the main topic of this paragraph?

Students who use these guides often feel the security of the teacher's help while they work and learn independently.

However, sometimes these types of suggestions are beyond the scope of some teachers, are not palatable or are simply not enough. In that case, we may need some alternatives to using a textbook as the main means of instruction. Many teachers employ the following strategies but they are always worth reviewing. Some particularly useful ideas include tape recording the reading assignments (or having another student do it) and letting less

[1] William Durr et al. The Houghton Mifflin Reading Series: Diversity. Boston: Houghton Mifflin Company, 1974, p. 249.

capable readers listen and read along; using a vareity of audio-visual materials to explain and clarify text ideas; particularly in heterogeneous classes, having a buddy system where a competent reader works with a troubled one; making flexible assignments so that each group or each individual is expected to meet different criteria while learning basically the same material; switching to lower level textbooks, that match the students' instructional reading levels, whenever possible.

Now if all of these suggestions do not work with the textbook, the best idea may be to eliminate the text completely. For especially limited students, the language experience approach can be successfully used. As teachers, we can show a filmstrip or a film or talk about some pictures or do a science experiment. Then, we can let the students dictate what they have learned while we write it down, so that they can later read it. The careful teacher can lead groups through this procedure so that they learn essentially the same concepts that they would have learned through the read-lecture-discuss method. It is also much less frustrating and tedious for both students and teacher.

Another alternative approach would be to do individualized reading in the content areas. This approach is particularly helpful in groups where the range of abilities is very great and also works well with the unit approach. A good librarian is a tremendous help here, but the idea is to collect as many materials as possible on the topic to be studied. It is important

to try to get materials that will be suitable for the poorest readers as well as the most able. Some may be just pictures or tapes, while others might be newspaper clippings or comic books or magazine articles or supplementary books. After the materials are made available to the students, they are allowed to read whatever they like and are capable of reading. After reading, we as teachers must have individual or group conferences and lead discussions. We must help the students assimilate their ideas and draw conclusions. Again, the results are usually the same or better than those achieved through traditional methods, minus the anxiety.

These five areas, then, are the backbone of teaching reading in and with the content areas. Successful learning comes from knowing our textbooks and our students' competencies in using them, preparing the students before they read and using alternatives to the text or eliminating it altogether. These strategies all work, and they will help those content area teachers and students who try them.

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